

IKEUCHI SATO & PARTNER PATENT ATTORNEYS

26th FLOOR, OAP TOWER
8-30, TENMABASHI 1-CHOME, KITA-KU, OSAKA-SHI, OSAKA 56026, JAPAN
TELEPHONE: 81(0)6-6135-6051 FACSIMILE: 81(0)6-6135-6052
E-mail: email@ikeuchi-sato.or.jp

JAPANESE PATENT ATTORNEYS:
Hiroyuki IKEUCHI Takashi NOYAMA
Kimihiro SATO Hitoshi WADA
Takashi HAYASHI Reiko TOTANI
Keiji TORAOKA Yumi NAKAYAMA
Koichiro TSUJIMARU Setsuko WAKATSUKI
Keiko KAWAKAMI

26 December 2003

The International Bureau of WIPO
PCT Division
34, chemin des Colombettes
1211 GENEVA 20
Switzerland

"Amendment of the claims under Article 19 (1) (Rule 46)"

Re: International Application No./ PCT/JP03/07908
Applicant: MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.
Agent: IKEUCHI, SATO & PARTNER PATENT ATTORNEYS
International Filing Date: 23. 06. 2003
Our Ref.: H1824-01

Dear Sir:

The Applicant, who received the International Search Report relating to the above identified International Application transmitted on 11 November 2003, hereby files amendment under Article 19 (1) as in the attached sheets.

That is, claims 1, 3, 5, 6, and 13 are amended, claims 2, 14 and 15 are deleted, and claims 4, 7 to 12 and 16 to 21 are retained unchanged.

Sincerely yours,

Takashi Hayashi for
IKEUCHI SATO & PARTNER PATENT
ATTORNEYS
Representative Partner
Hiroyuki IKEUCHI

Attachment:

(1) Amendment under Article 19(1) 5 sheets

CLAIMS

1. A metadata production device, comprising:
a content reproduction portion that reproduces and outputs content;
5 a voice input portion;
a voice recognition portion that recognizes voice signals that are input from the voice input portion;
a metadata generation portion that converts information recognized by the voice recognition portion into metadata; and
10 an identification information attaching portion that obtains identification information for identifying positions within the content from the reproduced content that is supplied from the content reproduction portion and attaches the identification information to the metadata, whereby the generated metadata is associated with positions in the content.
15
2. The metadata production device according to claim 1,
further comprising a dictionary related to the content, wherein, to recognize the voice signals input from the voice input portion with the voice recognition portion, the recognition is performed in association with the
20 dictionary.
3. The metadata production device according to claim 2,
wherein the voice signals are recognized by the voice recognition portion word by word in association with the dictionary.
25
4. The metadata production device according to claim 1 or 3,
further comprising an information processing portion including a keyboard, wherein the metadata can be corrected through the information processing portion by input from the keyboard.
30
5. The metadata production device according to any of claims 1 to 5,
wherein time code information that is attached to the content is used as the identification information.
- 35 6. The metadata production device according to any of claims 1 to 6,
wherein content addresses, numbers or frame numbers attached to the content are used as the identification information.

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7. The metadata production device according to claim 1,
wherein the content is still-picture content, and the addresses of the
still-picture content are used as the identification information.

5 8. The metadata production device according to claim 1, wherein
the content reproduction portion is configured by a content database;
the voice input portion supplies to the voice recognition portion voice
signals of entered keywords that are converted into data with a clock signal
10 that is synchronized with a synchronization signal supplied from the content
database;

the voice recognition portion is configured to recognize the keywords
from the voice signal data that have been converted into data by the voice
input portion; and

15 the metadata generation portion is configured as a file processing
portion that produces a metadata file by using, as the identification
information, a time code that indicates a time position of an image signal
included in the content, and combining the keywords that are output from
the voice recognition portion with that time code.

20 9. The metadata production device according to claim 8,
further comprising a recording portion that records the content that
is supplied from the content database together with the metadata file as a
content file.

25 10. The metadata production device according to claim 9,
further comprising a content information file processing portion that
generates a control file controlling the relation between the metadata file
and recording positions at which the content file is to be recorded;

30 wherein the control file is recorded in the recording portion together
with the content file and the metadata file.

35 11. The metadata production device according to claim 8,
further comprising a dictionary database, wherein the voice
recognition portion can select a dictionary of a genre corresponding to the
content from a plurality of genre-dependent dictionaries.

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12. The metadata production device according to claim 11, wherein keywords related to the content can be supplied to the voice recognition portion; and

5 the voice recognition portion is configured to recognize those keywords with higher priority.

13. A method for producing metadata, comprising: voice-inputting information related to a given content; subjecting the input voice signal to voice recognition with a voice recognition device; converting voice-recognized
10 information into metadata; and attaching identification information provided to the content for identifying positions in the content to the metadata, thereby associating the generated metadata with the positions in the content.

14. The method for producing metadata according to claim 13,
15 wherein information related to the content is voice-input while displaying the content on a reproduction monitor.

15. The method for producing metadata according to claim 13,
20 wherein a dictionary related to the content is used, and the input voice signals are recognized by the voice recognition device through association with the dictionary.

16. The method for producing metadata according to claim 13,
25 wherein time code information that is attached to the content is used as the identification information.

17. The method for producing metadata according to claim 13,
30 wherein the content is still-picture content, and the addresses of the still-picture content are used as the identification information.

18. A metadata search device, comprising:
a content database that reproduces and outputs content;
a voice input portion that converts voice signals of entered keywords
35 into data with a clock signal that is synchronized with a synchronization signal of the reproduced content;
a voice recognition portion that recognizes the keywords from the

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voice signal data that have been converted into data by the voice input portion;

a file processing portion that produces a metadata file by combining the keywords output from the voice recognition portion with time codes that indicate a time position of an image signal that is included in the content;

a content information file processing portion that generates a control file controlling a relation between the metadata file and recording positions of the content file;

a recording portion that records the content file, the metadata file and the control file; and

a search portion that extracts a recording position corresponding to a keyword in the content file by specifying the metadata files in which an entered search keyword is included, and referencing the control file;

wherein the recording position of the content file corresponds to the recording position in the recording portion.

19. The metadata search device according to claim 18,

wherein the control file that is output from the content information file processing portion is devised as a table that lists recording positions of content in the recording portion in accordance with a recording time of the content, and the recording position of the content can be searched from the time code.

20. The metadata search device according to claim 18,

further comprising a dictionary database, and a keyword supply portion that supplies keywords related to the content into the voice recognition portion;

wherein the voice recognition portion can select a dictionary of a genre corresponding to the content from a plurality of genre-dependent dictionaries, and the voice recognition portion is configured to recognize those keywords with higher priority.

21. The metadata search device according to claim 18,

further comprising a dictionary database;

wherein the voice recognition portion can select a dictionary of a genre corresponding to the content from a plurality of genre-dependent dictionaries; and

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wherein the search portion is configured to search by keywords that are chosen from a common dictionary used by the voice recognition portion.

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